

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of the claims in this application.

1. **(Currently Amended)** A genetically modified plant cell ~~having an increased activity of at least one Class 3 branching enzyme in comparison with corresponding wild type plant cells that have not been genetically modified, wherein the genetic modification is the introduction of at least one foreign nucleic acid molecule which codes a class 3 branching enzyme into the genome of the plant, and wherein the class 3 branching enzyme has an iso-amylase domain (Pfam acc.: Pf02922) and an alpha-amylase domain (Pfam acc: Pf00128) which are separated from one another by at least 100 amino acids comprising:~~
 - a) a nucleic acid molecule encoding the amino acid sequence of SEQ ID NO 4;
 - b) a nucleic acid molecule encoding an amino acid sequence with an identity of at least 95% with the amino acid sequence of SEQ ID NO: 4;
 - c) a nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO: 3 or a complementary sequence thereof;
 - d) a nucleic acid molecule comprises a nucleic acid sequence with an identity of at least 95% with the nucleic acid sequences described under a) or c);
 - e) a nucleic acid molecule comprising a nucleic acid sequence which deviates from the sequence of the nucleic acid molecules identified under a), b), c), or d) due to the degeneration of the genetic code; or
 - f) fragments, allelic variants, or derivatives of the nucleic acid molecules identified under a), b), c), or d) that retain the biological activity of a nucleic acid molecule encoding the amino acid sequence of SEQ ID NO 4,
wherein said genetically modified plant cell has an increased activity of at least one Class 3 branching enzyme in comparison with corresponding wild type plant cells that have not been genetically modified.
2. **(Cancelled)**
3. **(Cancelled)**

4. **(Cancelled)**
5. **(Previously Presented)** The genetically modified plant cell according to Claim 1, wherein said foreign nucleic acid molecule is a DNA molecule linked with regulatory sequences for transcription in vegetable cells.
6. **(Previously Presented)** A plant cell according to Claim 1, which synthesizes a modified starch in comparison with corresponding wild type plant cells that have not been genetically modified.
7. **(Previously Presented)** A plant containing plant cells according to Claim 1.
8. **(Previously Presented)** A plant according to Claim 7, which is a starch-storing plant.
9. **(Previously Presented)** A plant according to Claim 7, which is a maize, rice, wheat, rye, oat, barley, cassava, potato, sago, mung bean, pea or sorghum plant.
10. **(Previously Presented)** The plant according to Claim 9, which is a potato plant.
11. **(Previously Presented)** Propagation material of plants according to Claim 7.
12. **(Previously Presented)** Harvestable plant parts of plants according to Claim 7.

13. **(Currently Amended)** A method for the manufacture of a genetically modified plant comprising ~~[[a)]]~~ genetically modifying a plant cell, ~~by comprising:~~
- a) introducing at least one foreign nucleic acid molecule ~~which~~ into a plant cell, wherein said foreign nucleic acid molecule comprises:
 - (i) a nucleic acid molecule encoding a protein comprising the amino acid sequence of SEQ ID NO: 4,
 - (ii) a nucleic acid molecule encoding a protein comprising an amino acid sequence with an identity of at least 95% with the amino acid sequence of SEQ ID NO: 4;
 - (iii) a nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO: 3 or a complementary sequence thereof;
 - (iv) a nucleic acid molecule comprising a nucleic acid sequence with an identity of at least 95% with the nucleic acid sequences described under (i) or (iii);
 - (v) a nucleic acid molecule comprising the nucleic acid sequence which deviates from the sequence of the nucleic acid molecules identified under (i), (ii), (iii), or (iv) due to the degeneration of the genetic code; or
 - (vi) fragments, allelic variants, or derivatives of the nucleic acid molecules identified under (i), (ii), (iii), or (iv) that retain the biological activity of a nucleic acid molecule encoding a protein comprising the amino acid sequence of SEQ ID NO: 4,
 - and wherein said genetically modified plant cell has an increased activity of at least one Class 3 branching enzyme in comparison with corresponding wild type plant cells that have not been genetically modified;
 - b) regenerating a plant from said plant cells ~~from~~ of Step a); and
 - c) ~~if necessary~~ optionally, producing further plants with the plants according to Step b).

14. **(Cancelled)**

15. **(Cancelled)**

16. **(Previously Presented)** The method according to Claim 13, wherein said foreign nucleic acid molecule is a DNA molecule linked with regulatory sequences for transcription in vegetable cells.
17. **(Previously Presented)** A method according to Claim 13, wherein the genetically modified plant synthesizes a modified starch in comparison with corresponding wild type plants that have not been genetically modified.
18. **(Previously Presented)** A modified starch obtainable from a genetically modified plant according to Claim 7, from propagation material according to Claim 11, or from harvestable plant parts according to Claim 12.
19. **(Previously Presented)** A method for the manufacture of a modified starch including the step of extracting the starch from a plant cell according to Claim 1.
20. **(Previously Presented)** A method for the manufacture of a modified starch including the step of extracting the starch from a plant according to Claim 7.
21. **(Previously Presented)** A method for the manufacture of a modified starch including the step of extracting the starch from harvestable plant parts according to Claim 12.
22. **(Previously Presented)** A method for the manufacture of a derived starch, wherein modified starch according to Claim 18 or obtainable by the method according to Claim 19 is derived.
23. **(Cancelled)**
24. **(Previously Presented)** A modified starch obtainable by the method according to Claim 19.
25. **(Previously Presented)** Derived starch obtainable by the method according to Claim 22.

26. **(Cancelled)**

27. **(Cancelled)**

28. **(Cancelled)**

29. **(New)** The plant cell of claim 1, wherein said plant cell is a potato plant cell.

30. **(New)** The method of claim 13, wherein said plant cell is a potato plant cell.